
 CARLO GAVAZZI CARLO GAVAZZI SPACE SpA	<h1>AMS02-PDS</h1>	DOC N°: PDS-RP-CGS-032 ISSUE : 1 DATE: 20/06/2008 PAGE : 1 of 7
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INSPECTION REPORT

APPLICABLE DOC. REF. AMS02-PDS PFM Manufacturing and Inspection Plan PDS-PL-CGS-001 is. 1	PROC. REF. N.A.	
ITEM INSPECTED (Name, P/N, S/N) AMS02-PDS PFM – Visual inspection of some Piggy Back Boards before partially conformal coating — Inspection Point.		
REQUIREMENT SATISFIED Manufacturing according to aerospace standards		
INSPECTION (Action/Results) DESCRIPTION Inspection was performed at Carlo Gavazzi Space premises starting on 20 June 2008 and was carried out on the following boards before partially conformal coating applied only on one layer, detail of the inspected boards were below reported: <ol style="list-style-type: none"> 1) Esem 1-A PIGGY BACK ASSEMBLY p/n:11-AMS02PDS-610.00 s/n:07-032/A. 2) PB2 FRONT PANEL BOARD ASSY p/n:11-AMS02PDS-730.00 s/n:07/020/A. 3) PB2 EMI FILTER BOARD ASSY p/n:11-AMS02PDS-720.00 s/n:07/018/H. 4) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07/038/A. 5) AUX DC/DC BOARD ASSY p/n: 11-AMS02PDS-740.00 s/n: 07/014/E. 6) PB2 FRONT PANEL BOARD ASSY p/n:11-AMS02PDS-730.00 s/n:07/020/B. 7) PB2 EMI FILTER BOARD ASSY p/n:11-AMS02PDS-720.00 s/n:07/018/G. 8) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07/038/B. 9) AUX DC/DC BOARD ASSY p/n: 11-AMS02PDS-740.00 s/n: 07/014/D. HARDWARE REVIEW 1) Esem 1-A PIGGY BACK ASSEMBLY p/n:11-AMS02PDS-610.00 s/n:07-032/A, Assy:11-AMS02PDS-610.00 rev./, Parts List:11-AMS02PDS-610.01 rev.A, Electrical Scheme:11-AMS02PDS-610.02 rev./, Master PCB:11-AMS02PDS-610.03 rev./. The following NCRs were presented during the inspection: <ul style="list-style-type: none"> • NCR-PDS-CGS-C-023(over voltage protection missing), NCR classified “minor” is still open during the inspection activity, the following corrective actions will be performed: glue the added wires with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. • NCR-PDS-CGS-C-068(over voltage protection missing connection), NCR classified “minor” is still open during the inspection activity, the following corrective actions will be performed: connect two pads of U36, glue the added wire with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. The following PLVs (Parts List Variation Sheet) were presented during the inspection: <ul style="list-style-type: none"> • 11-AMS02PDS-610.01 rev A – A1 can be considered closed. • 11-AMS02PDS-610.01 rev A – A2 can be considered closed. • 11-AMS02PDS-610.01 rev A – A3 can be considered closed. 		
Operator	Quality Assurance	C.C.
Signature	E. FRANCINI	C. CINQUEPACCHI
Date	20/06/08	20/06/08

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p>AMS02-PDS</p>	<p>DOC N°: PDS-RP-CGS-032</p> <p>ISSUE : 1 DATE: 20/06/2008</p> <p>PAGE : 2 of 7</p>
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INSPECTION REPORT

<p>APPLICABLE DOC. REF.</p> <p>See page 1</p>	<p>PROC. REF.</p> <p>See page 1</p>												
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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>													
<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> • 11-AMS02PDS-610.01 rev A – A4 can be considered closed. • 11-AMS02PDS-610.01 rev A – A5 can be considered closed. • 11-AMS02PDS-610.01 rev A – A6 can be considered closed. • 11-AMS02PDS-610.01 rev A – A7 can be considered closed. • 11-AMS02PDS-610.01 rev A – A8 can be considered closed. • 11-AMS02PDS-610.01 rev A – A9 can be considered closed. • 11-AMS02PDS-610.01 rev A – A10 can be considered closed. • 11-AMS02PDS-610.01 rev A – A11 can be considered closed. • 11-AMS02PDS-610.01 rev A – A12 can be considered closed. • 11-AMS02PDS-610.01 rev A – A13 can be considered closed. • 11-AMS02PDS-610.01 rev A – A14 can be considered closed. • 11-AMS02PDS-610.01 rev A – A15 can be considered closed. • 11-AMS02PDS-610.01 rev A – A16 can be considered closed. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <p>2) PB2 FRONT PANEL BOARD ASSY p/n:11-AMS02PDS-730.00 s/n:07/020/A, Assy:11-AMS02PDS-730.00 rev.A, Parts List: 11-AMS02PDS-730.01 rev.A, Electrical Scheme: 11-AMS02PDS-730.02 rev.A, Master PCB: FSL-030141-DR-03-CGS rev./.</p> <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> • 11-AMS02PDS-730.01 rev A - A1 can be considered closed. • 11-AMS02PDS-730.01 rev A - A2 can be considered closed. • 11-AMS02PDS-730.01 rev A - A3 can be considered closed. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <table border="1" data-bbox="130 1792 1465 1942"> <thead> <tr> <th></th> <th>Operator</th> <th>Quality Assurance</th> <th>C.C.</th> </tr> </thead> <tbody> <tr> <td>Signature</td> <td></td> <td>E. FRANCINI</td> <td>C. CINQUE PALMI</td> </tr> <tr> <td>Date</td> <td></td> <td>20/06/08</td> <td>20/06/08</td> </tr> </tbody> </table>			Operator	Quality Assurance	C.C.	Signature		E. FRANCINI	C. CINQUE PALMI	Date		20/06/08	20/06/08
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 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p>AMS02-PDS</p>	<p>DOC N°: PDS-RP-CGS-032</p> <p>ISSUE : 1 DATE: 20/06/2008</p> <p>PAGE : 3 of 7</p>
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INSPECTION REPORT

<p>APPLICABLE DOC. REF.</p> <p>See page 1</p>	<p>PROC. REF.</p> <p>See page 1</p>
<p>ITEM INSPECTED (Name, P/N, S/N)</p> <p>See page 1</p>	
<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <p>3) PB2 EMI FILTER BOARD ASSY p/n:11-AMS02PDS-720.00 s/n:07/018/H, Assy:11-AMS02PDS-720.00 rev./, Parts List:11-AMS02PDS-720.01 rev.A, Electrical Scheme:11-AMS02PDS-720.02 rev./, Master PCB: SPO-PD-020503-DR-03-CGS rev./.</p> <p>The following NCR was presented during the inspection:</p> <ul style="list-style-type: none"> NCR-PDS-CGS-C-011(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the components with adhesive EC 2216 B/A, perform a visual inspection of the previous reworks. <p>The following PLVS (Parts List Variation Sheet) was presented during the inspection:</p> <ul style="list-style-type: none"> 11-AMS02PDS-720.01 rev A - A1 can be considered closed. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <p>4) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07/038/A, Assy:11-AMS02PDS-710.00 rev./, Parts List: 11-AMS02PDS-710.01rev.A, Electrical Scheme: 11-AMS02PDS-710.02 rev./, Master PCB:11-AMS02PDS-710.03 rev./.</p> <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> 11-AMS02PDS-710.01 rev A - A1 can be considered closed. 11-AMS02PDS-710.01 rev A - A2 can be considered closed. 11-AMS02PDS-710.01 rev A - A5 is still open. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <p>5) AUX DC/DC BOARD ASSY p/n: 11-AMS02PDS-740.00 s/n: 07/014/E, Assy:11-AMS02PDS-740.00 rev./, Parts List:11-AMS02PDS-740.01 rev./, Electrical Scheme:11-AMS02PDS-740.03 rev./, Master PCB:SPO-PD-020010-DR-03-CGS rev./.</p> <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> 11-AMS02PDS-740.01 rev / - A1 can be considered closed. 11-AMS02PDS-740.01 rev / - A2 can be considered closed. 11-AMS02PDS-740.01 rev / - A3 can be considered closed. 11-AMS02PDS-740.01 rev / - A4 can be considered closed. 	
<p>Operator</p> <p>Signature</p> <p>Date</p>	<p>Quality Assurance</p> <p>C.C.</p>

E. FRANCINI

20/06/08

G. CINQUEPACCHI

20/06/08

INSPECTION REPORT

APPLICABLE DOC. REF.

See page 1

PROC. REF.

See page 1

ITEM INSPECTED (Name, P/N, S/N)

See page 1

REQUIREMENT SATISFIED

See page 1

INSPECTION (Action/Results)

- 11-AMS02PDS-740.01 rev / - A5 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A6 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A7 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A8 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A9 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A10 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A11 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A13 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A15 can be considered closed.
- 11-AMS02PDS-740.01 rev / - A16 can be considered closed.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-038(pcb connection missing), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the added wire with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- NCR-PDS-CGS-C-045(over voltage current protection improvement), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added components and wires glued.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

6) PB2 FRONT PANEL BOARD ASSY p/n:11-AMS02PDS-730.00 s/n:07/020/B, Assy:11-AMS02PDS-730.00 rev.A, Parts List: 11-AMS02PDS-730.01 rev.A, Electrical Scheme: 11-AMS02PDS-730.02 rev.A, Master PCB: FSL-030141-DR-03-CGS rev./.

The following PLVSS (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-730.01 rev A - A1 can be considered closed.
- 11-AMS02PDS-730.01 rev A - A2 can be considered closed.
- 11-AMS02PDS-730.01 rev A - A3 can be considered closed.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

Operator	Quality Assurance	C.C.
Signature	E. FRANCINI	C. CINQUEPACCHI
Date	20/06/08	20/06/08

CARLO GAVAZZI

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AMS02-PDS

DOC N°: PDS-RP-CGS-032

ISSUE : 1 DATE: 20/06/2008

PAGE : 5 of 7

INSPECTION REPORT

APPLICABLE DOC. REF.

See page 1

PROC. REF.

See page 1

ITEM INSPECTED (Name, P/N, S/N)

See page 1

REQUIREMENT SATISFIED

See page 1

INSPECTION (Action/Results)

7) PB2 EMI FILTER BOARD ASSY p/n:11-AMS02PDS-720.00 s/n:07/018/G, Assy:11-AMS02PDS-720.00 rev./, Parts List:11-AMS02PDS-720.01 rev.A, Electrical Scheme:11-AMS02PDS-720.02 rev./, Master PCB: SPO-PD-020503-DR-03-CGS rev./.

The following NCR was presented during the inspection:

- NCR-PDS-CGS-C-012(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the components with adhesive EC 2216 B/A, perform a visual inspection of the previous reworks.

The following PLVS (Parts List Variation Sheet) was presented during the inspection:

- 11-AMS02PDS-720.01 rev A - A1 can be considered closed.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

8) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07/038/B, Assy:11-AMS02PDS-710.00 rev./, Parts List: 11-AMS02PDS-710.01rev.A, Electrical Scheme: 11-AMS02PDS-710.02 rev./, Master PCB:11-AMS02PDS-710.03 rev./.

The following PLVSs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-710.01 rev A - A1 can be considered closed.
- 11-AMS02PDS-710.01 rev A - A2 can be considered closed.
- 11-AMS02PDS-710.01 rev A - A4 can be considered closed.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

Operator

Quality Assurance

C.C.


Signature

Date

E. FRANCHI

20/06/08

C. CINQUEPACI
e-cuppa
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INSPECTION REPORT


<p>APPLICABLE DOC. REF.</p> <p>See page 1</p>	<p>PROC. REF.</p> <p>See page 1</p>
<p>ITEM INSPECTED (Name, P/N, S/N)</p> <p>See page 1</p>	
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<p>INSPECTION (Action/Results)</p> <p>9) AUX DC/DC BOARD ASSY p/n: 11-AMS02PDS-740.00 s/n: 07/014/D, Assy:11-AMS02PDS-740.00 rev./, Parts List:11-AMS02PDS-740.01 rev./, Electrical Scheme:11-AMS02PDS-740.03 rev./, Master PCB:SPO-PD-020010-DR-03-CGS rev./.</p> <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> • 11-AMS02PDS-740.01 rev / - A1 can be considered closed. • 11-AMS02PDS-740.01 rev / - A2 can be considered closed. • 11-AMS02PDS-740.01 rev / - A3 can be considered closed. • 11-AMS02PDS-740.01 rev / - A4 can be considered closed. • 11-AMS02PDS-740.01 rev / - A5 can be considered closed. • 11-AMS02PDS-740.01 rev / - A12 can be considered closed. • 11-AMS02PDS-740.01 rev / - A15 can be considered closed. • 11-AMS02PDS-740.01 rev / - A17 can be considered closed. <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> • NCR-PDS-CGS-C-039(pcb connection missing), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added wire glued. • NCR-PDS-CGS-C-044(over voltage current protection improvement), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added components and wires glued. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p>	
<p>Operator</p> <p>Signature</p> <p>Date</p>	<p>Quality Assurance</p> <p>C.C.</p>

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INSPECTION REPORT

APPLICABLE DOC. REF. See page 1	PROC. REF. See page 1
ITEM INSPECTED (Name, P/N, S/N) See page 1	
REQUIREMENT SATISFIED See page 1	
INSPECTION (Action/Results) <u>CONCLUSION</u> <p>All solder joints are of adequate quality, the soldering process complies to ECSS-Q-70-08 and ECSS-Q-70-38, all modifications are performed according to ECSS-Q-70-28.</p> <p>The open points are here listed:</p> <ol style="list-style-type: none"> 1) NCR-PDS-CGS-C-023(over voltage protection missing), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the added wires with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. 2) NCR-PDS-CGS-C-068(over voltage protection missing connection), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: connect two pads of U36, glue the added wire with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. 3) NCR-PDS-CGS-C-011(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the components with adhesive EC 2216 B/A, perform a visual inspection of the previous reworks. 4) On PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07/038/A the PLVS 11-AMS02PDS-710.01 rev A – A5 is still open. 5) NCR-PDS-CGS-C-038(pcb connection missing), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the added wire with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. 6) NCR-PDS-CGS-C-045(over voltage current protection improvement), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added components and wires glued. 7) NCR-PDS-CGS-C-012(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the components with adhesive EC 2216 B/A, perform a visual inspection of the previous reworks. 8) NCR-PDS-CGS-C-039(pcb connection missing), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added wire glued. 9) NCR-PDS-CGS-C-044(over voltage current protection improvement), NCR classified "minor" is still open during the inspection activity, the following corrective action will be performed: perform a visual inspection on the added components and wires glued. 	
Operator Signature Date	Quality Assurance E. FRANCINI 20/06/08 
C.C. G. CINQUEPACCHI C. Cimpreri 20/06/08	